

REMARKS

In the Office Action mailed February 13, 2008, the Examiner noted that claims 1, 2, 5-9, 12-20, 23-29, 32 and 33 were pending and rejected claims 1, 2, 5-9, 12-20, 23-29, 32 and 33. Claims 1, 8, 15, 19, 24, 28 and 33 have been amended, no claims have been canceled, new claim 34 has been added; and, thus, in view of the foregoing claims 1, 2, 5-9, 12-20, 23-29 and 32-34 remain pending for reconsideration which is requested. No new matter is believed to have been added. The Examiner's rejections are respectfully traversed below.

PTO FORM-1449

In the PTO Form-1449 attached to the Office Action mailed July 30, 2007, the Examiner did not consider the references AG and AH. The Examiner is respectfully requested to either consider the references or contact the undersigned to address the matter with respect to considering the references cited AG and AH in the PTO Form 1449.

Rejections under 35 U.S.C. § 103

In item 2 on page 2 of the Office Action, claims 1, 2, 5-9, 12-20, 23-29, 32 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Oe (U.S. Publication No. 2006/0041614) and further in view of Mitsuoka et al. (U.S. Publication No. 2003/0154281).

Oe is related to a data access responding system that relates to an art of accessing a storage apparatus such as a hard disk from a client apparatus such as a personal computer (see Oe, paragraph [0003]). The Office Action, in the response to arguments section on page 6 item B, alleged that paragraph [0019] of Oe discloses collectively managing the respective storage area using different storage usage ways.

However, it is submitted that the assertion by the Office Action is incorrect. Particularly, because claim 1 requires that that the management server "collectively [manage] ... the respective storage **areas** ... of their respective servers ... using different storage area usage ways ... available at a same time", rather than managing their respective storage **area** as alleged by the Office Action.

Further, paragraph [0019] of Oe describes that the control apparatus carries out management of data stored in the storage apparatus and the cache apparatus and unilaterally receives an access request from a client for data stored in the storage apparatus and the cache apparatus. When the data, for which access request is made by the client apparatus, is stored in either the storage apparatus or the cache apparatus, the control apparatus provides a data

transfer instruction to this one apparatus. Stated another way, paragraph [0019] of Oe describes that data can be either received from a storage apparatus or a cache apparatus.

Therefore, Oe fails to disclose, explicitly or implicitly, at least the recitation “managing collectively ... the respective storage areas ... of their respective servers ... *using different storage area usage ways* including a single usage way, an integrated usage way, a multiplicate usage way and a divided usage way *available at a same time*” of claim 1, because Oe is merely concerned with providing a data transfer instruction to either the storage apparatus or cache apparatus depending on the location of the stored data.

Moreover, paragraph [0017] of Oe describes that

[the] data access responding system includes a storage apparatus storing data; a cache apparatus [that] acts as a cache for data stored in the storage apparatus; a client apparatus that process[es] the data, and a control apparatus [that] manag[es] storage locations of the data in the storage apparatus and in the cache apparatus ... [W]herein the control apparatus provides a transfer instruction to one of the storage apparatus and the cache apparatus ... when receiving an access request from the client apparatus for the data.

Stated another way, paragraph [0017] of Oe is merely concerned with managing data stored in a storage or a cache and providing a transfer signal to either the storage or the cache when a client requests for the data stored therein.

However, claim 1 requires registration of “the storage areas of the ... plurality of servers ... in the management unit” to allow the management unit to “collectively [manage] ... the respective storage areas ... of the respective servers ... using different storage area usage ways ... available at the same time”. Therefore, such features as quoted above are not disclosed, explicitly or implicitly, in Oe because paragraph [0017] of Oe is merely concerned with transmitting a transfer signal from the control apparatus to either the storage or the cache when a request from a client for data is received at the control apparatus.

Further, Mitsuoka et al. relates to a storage system and method for controlling a storage system (see Mitsuoka et al., Abstract). However, nothing was found in Mitsuoka et al. that cures the deficiencies of Oe as discussed above. Therefore, it is submitted that claim 1 is patentable over Oe and Mitsuoka, taken alone or in combination.

Further, claims 8, 15, 19, 24, 28 and 33 have been amended to emphasize features similar to those in claim 1. Therefore, it is submitted that claims 8, 15, 19, 24, 28 and 33 are patentable over Oe and Mitsuoka, taken alone or in combination, for reasons similar to those discussed above with respect to claim 1.

The dependent claims are patentable over Oe and Mitsuoka, taken alone or in combination, for at least the same reasons as their respective base claims, from which they depend.

Accordingly, withdrawal of the rejections is respectfully requested.

New Claim

New claim 34 has been added to recite

registering, in a table of a management server, a plurality of storage usage ways that correspond to storage devices of related servers; and

collectively managing, at the management server, the storage devices using the plurality of storage usage ways available at a same time to allow the servers to share storage devices with other servers

(claim 34, lines 2-6), which is supported by at least one of the embodiments of the invention on page 6, line 5 to page 8, line 10 and Figure 1B of the Application.

It is submitted that none of the references, taken alone or in combination, particularly disclose, expressly or implicitly, the feature of "collectively managing, at the management server, the storage devices using the plurality of storage usage ways available at a same time to allow the servers to share storage devices with other servers" as recited in claim 34. Therefore, it is submitted that claim 34 is patentable over the cited references.

Summary

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.


Serial No. 10/790,118

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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